

2) (Gingin chalk), Upper Cretaceous of Australia; *V. superba* Earland (1934: 118), Recent in the Antarctic; *V. spiculotesta* Cushman (1935: 2), Recent off Puerto Rico; and "V." *cummingensis* Nauss (Cummings member of the Mannville formation), Upper Cretaceous of Alberta, Canada. Nauss (1947: 340) stated, "Further study may reveal that these arenaceous Foraminifera with subcircular cross-section should be considered a new genus. . ." but tentatively referred the species to *Verneuilina*.

The species *Verneuilina schizea* Cushman and Alexander was selected as the genotype for a number of reasons. The writers have a large suite of topotypes of this species and have studied the holotype at the Cushman Laboratory. This species shows all the generic characters well, is quite abundant in the Lower Cretaceous Goodland formation where it occurs, and material from the type locality at the Lake Worth Dam near Fort Worth, Tex., is easily obtainable. Many of the other species referred above to *Verneulinoides* are extremely rare or from dredgings or well material so that topotypes or representative material cannot easily be obtained by future workers.

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ENTOMOLOGY.—*The caddisfly genus Neothremma Banks (Trichoptera: Limnephilidae).*¹ HERBERT H. ROSS, Urbana, Ill.

Until recently the very interesting genus *Neothremma* has been known only on the basis of the genotype, *alicia* Banks. A few years ago Dr. W. E. Ricker sent me material of a second species, which is of great assistance in giving a little better perspective to the facies of the genus. The two species may be separated by the following key:

Male with lateral process of ninth segment nearly straight, its apical fork vertical in position and with nearly equal arms, Fig. 2; fused claspers elongate and only slightly emarginate at apex, Fig. 2A. Female with subgenital plate narrowing toward apex and very deeply and widely emarginate, Fig. 2B. *alicia* Banks
 Male with lateral process of ninth segment strongly curved ventrad, the fork horizontal, the inner

Neothremma Banks (Trichoptera: Limnephilidae). Illinois State Natural History Survey,

finger much shorter than the outer, Fig. 1; fused claspers short and tri-emarginate, with a pair of sharp points near the meson, Fig. 1B. Female with subgenital plate expanding toward apex, the apical margin obliquely emarginate, with a slightly deeper but small cleft in the middle, Fig. 1C. *didactyla*, n. sp.

Neothremma didactyla, n. sp.

Male.—Length 6.5 mm. Color moderately dark brown, antennae and legs below coxae yellowish brown. General structure of warts, spurs, and venation typical for *alicia*. Maxillary palp subequal in length to labial palp, first and third segments short and subequal, second segment one and one-half times length of third, all three with a sparse mesal brush of fairly long, irregular hair. Front of head with mesal sclerite bearing a patch of sparse setae which have

¹ Received January 7, 1949.

a long thread and a short, flattened, scalelike apex. Tibiae with only a few scattered spines in addition to the tibial spurs. Male genitalia exhibiting the general features of the peculiar type associated with this genus, Fig. 1. Ninth segment narrow dorsally but fairly long laterally, bearing near the middle of the postero-lateral margin a long sclerotized process (which may represent the cercus), which is strongly curved ventrad and is forked at the tip, the forking being seen best from a postero-dorsal view, Fig. 1A, showing the short inner finger; below this process is a large wide and flat process only half as long as the forked one, and covered with spiculations. The two claspers are fused, and the apical margin of this single structure, Fig.

1B, is divided into broad lateral lobes and a pair of closely approximated mesal projections which are pointed and curved dorsad. Tenth tergite forming a pair of closely appressed, heavily sclerotized blades which are very long and curve ventrad, extending beyond the other parts of the genitalia. Aedeagus and its accessory structures forming a short broad structure, the tip of the aedeagus projecting as a slender sclerotized rod.

Female.—Size, color, and general structure typical for male. Maxillary palp normal for family, longer than labial palp, the first two segments short, the next three longer. Front of head without areas of petiolate scales. Genitalia, Fig. 1C, having a large single subgenital plate, narrowest at base, its apical margin

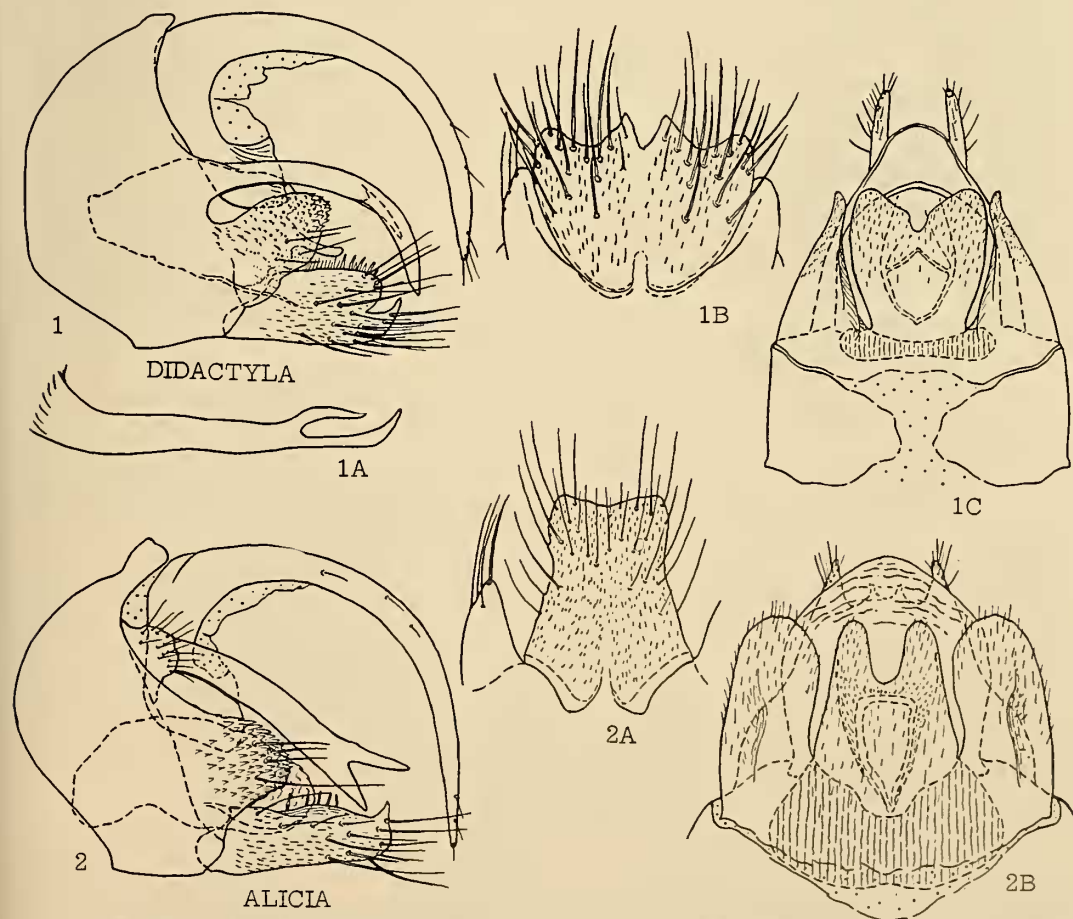


FIG. 1.—*Neothremma didactyla*, male genitalia, lateral view: 1A, Postero-dorsal aspect of forked process; 1B, claspers, ventral aspect; 1C, female genitalia, ventral aspect.

FIG. 2.—*Neothremma alicia*, male genitalia, lateral aspect: 2A, Claspers, ventral aspect; 2B, female genitalia, ventral aspect.

incised as shown. Lateral lobes of ninth segment tapering to apex and pointed. Subgenital plate connected to an internal basal sclerotized plate which is small and bandlike.

Types.—Holotype, male: Mount Baker, Wash.,

along small creek, elevation 6,000 feet, August 29, 1946, W. E. Ricker. Allotype, female, and 9 male and 1 female paratypes: Same data as holotype. Deposited in the collection of the Illinois Natural History Survey.

ZOOLOGY.—*Some millipeds of the families Polydesmidae and Xystodesmidae.*¹
RALPH V. CHAMBERLIN, University of Utah. (Communicated by C. F. W. MUESEBECK.)

The new forms of millipeds diagnosed and illustrated in the present paper are represented in the author's collection where all types are for the present retained.

Family POLYDESMIDAE

Ergodesmus n. gen.

A genus close to *Nearctodesmus*. The gonopods are short and compact. As in *Nearctodesmus*, there are three divisions or branches in the telopodite of the male gonopods, but one of these is anterior and one posterior in position, instead of both arising from the anterior side of the principal division. Of the three branches the anterior one is segmented, with its distal subdivision slenderly acuminate and forming part of a circle. The posterior branch is closely applied to the main or median division against the apical part of which it curves.

Orthotype: *Ergodesmus compactus*, n. sp.

Ergodesmus compactus, n. sp.

Dorsum light reddish brown. Legs and antennae yellow.

The distinctive features of the gonopods of male, as described above under the genus, are shown in Fig. 1.

Width of male holotype, 2.5 mm.

Type locality.—Washington: Between Golden-dale and Mayfield. About a dozen males and females taken May 20, 1941, by R. V. Chamberlin.

Other records.—Washington: Richland, two males taken September 17, 1935, by R. V. Chamberlin; Orondo, several specimens, mature and immature, taken August 11, 1929, by Edith S. and R. V. Chamberlin.

Genus *Kepolydesmus* Chamberlin

Kepolydesmus Chamberlin, Ann. Ent. Soc. Amer. 3 (4): 246. 1910.

Generotype: *Kepolydesmus anderisus* Chamberlin.

A genus distinguished from *Nearctodesmus* primarily in having the outer branch of the telopodite of the male gonopods divided into two segments, which are distinctly separated, as shown in the accompanying figure for *K. hesperus*. Four species are at present known for the genus.

Kepolydesmus anderisus Chamberlin

Fig. 2

Polydesmus (Kepolydesmus) anderisus Chamberlin, Ann. Ent. Soc. Amer. 3 (4): 246, pls. 36: 6-9, 37: 1-4. 1910.

Type locality.—Idaho: Latah County, Kendrick.

Other localities.—Idaho: Kootenai County, Canyon, and Roselake, Fourth of July Canyon, R. V. Chamberlin coll., 1929; Clearwater County, Kooskia, males and females taken August 23, 1940

Kepolydesmus hesperus, n. sp.

Fig. 3

Dorsum reddish brown with caudal corners of tergites yellow. Antennae brown, in part of pink tinge. Legs light pink.

Outer branch of gonopods notably broader than in *mimus* but proportionately somewhat narrower than in *anderisus*, the apex of its distal division more acutely pointed than in *mimus*. The ectal hook at distal end of middle division larger than in the other two species mentioned and the adjacent distal lobe more acutely prolonged. See further Fig. 3.

Length, 25 mm; width, 3.8 mm.

Locality.—Oregon: Ashland. Four males taken September 9, 1935, by R. V. Chamberlin.

Kapolydesmus mimus Chamberlin

Kepolydesmus mimus Chamberlin, Proc. Biol. Soc. Washington 70: 10, pl. 10: 3. 1947.

¹ Received January 3, 1949.